

Amendments to the Specification

Page 1, before line 1, insert:

Cross Reference to Related Application

This application is a 35 USC § 371 National Phase Entry Application from PCT/EP03/04650 filed May 2, 2003 and designating the U.S.

The additions have been indicated by underlining (underlining).

Please replace the paragraph on page 42 lines 17-19 with the following amended paragraph:

Figure 3 shows the BLASTP search result for the Gadfly Accession Number CG7956 gene product (Query) [SEQ ID NO: 14] with the best human homologous match (Sbjct) [SEQ ID NO: 15].

Please replace the paragraph on page 43 lines 7-14 with the following amended paragraph:

Figure 7 shows the homology of Drosophila aralar 1 to human solute carrier family 25, members 11 and 12.

Figure 7A shows the BLASTP search results for the aralar 1 gene product (Query) with the two best human homologous matches. (Sbjct) [BLAST match to XP-010876.3 – Query: SEQ ID NO: 16; Sbjct: SEQ ID NO: 17 – BLAST match to NP_055066.1 – Query: SEQ ID NO: 18; Sbjct: SEQ ID NO: 19].

Figure 7B shows the comparison of human and Drosophila proteins. 'alaral 1 Dm' [SEQ ID NO: 20] refers to Drosophila protein encoded by aralar 1, 'SLC25A12 Hs' [SEQ ID NO: 21] refers to human solute carrier family 25, member 12, and 'SLC25A13 Hs' [SEQ ID NO: 22] refers to human solute carrier family 25, member 13.

Please replace the paragraph on page 44 lines 4-12 with the following amended paragraph:

Figure 11 shows the homology of Drosophila how (GadFly Accession Number CG10293) to the human quaking isoforms.

Figure 11A shows the BLASTP search result for the how gene product (Query) with the twelve best human homologous matches (Sbjct).

Figure 11B shows the comparison of human and Drosophila proteins. 'CG10293 Dm' [SEQ ID NO: 39] refers to Drosophila protein encoded by CG10293, 'QKI-6 Hs' [SEQ ID NO: 40] refers to human QUAKING isoform 6. 'QKI-2 Hs' [SEQ ID NO: 41] refers to human QUAKING isoform 2, 'QKI-3 Hs' [SEQ ID NO: 42] refers to human QUAKING isoform 3, and 'HQK-7B Hs' [SEQ ID NO: 43] refers to human RNA binding protein HQK-7B.

Please replace the paragraph on page 45 lines 1-10 with the following amended paragraph:

Figure 15 shows the homology of Drosophila GadFly Accession Number CG9373 to human KIAA1443 protein, unnamed protein product, and myelin gene expression factor 2.

Figure 15A shows the BLASTP search result for the CG9373 gene product (Query) with the three best human homologous matches (Sbjct).

Figure 15B shows the comparison of human and Drosophila proteins. 'CG9373 Dm' [SEQ ID NO: 59] refers to Drosophila protein encoded by CG9373, 'KIAA1341 Hs' [SEQ ID NO: 60] refers to human KIAA1341 protein, 'MyEF-2 Hs' [SEQ ID NO: 61] refers to human myelin gene expression factor 2, and 'FLJ13071 Hs' [SEQ ID NO: 62] refers to human unnamed protein product FLJ13071.

Please replace the paragraph which spans page 45 lines 31-32 through page 46 lines 1-7 with the following amended paragraph:

Figure 19 shows the homology of Drosophila cpo to human RNA binding proteins with multiple splicing.

Figure 19A shows the comparison of human and Drosophila proteins. 'cpo Dm' [SEQ ID NO: 1] refers to Drosophila protein encoded by cpo, 'NP_006858 Hs' [SEQ ID NO: 63] refers to human RNA binding protein with multiple splicing (RBPMS), and 'IPI001611' [SEQ ID NO: 64] refers to human RNA binding with multiple splicing (RBPMS) family member.

Figure 19B shows the amino acid sequence encoded by Drosophila cpo gene (GadFly Accession Number CG31243, SEQ ID NO: 1).

Please replace the paragraph on page 46 lines 23-30 with the following amended paragraph:

Figure 23 shows the homology of Drosophila Jafrac1 (GadFly Accession Number CG1633) to human peroxiredoxin 1 and 2.

Figure 23A shows the BLASTP search result for the Jafrac1 gene product (Query) with the best two human homologous matches (Sbjct) [BLAST match to XP-009063.2 – Query: SEQ ID NO: 65; Sbjct: SEQ ID NO: 66 – BLAST match to NP-002565.1 – Query: SEQ ID NO: 67; Sbjct: SEQ ID NO: 68].

Figure 23B shows the comparison of human and Drosophila proteins. 'Jafrac1 Dm' [SEQ ID NO: 69] refers to Drosophila protein encoded by Jafrac1, 'PRDX1 Hs' [SEQ ID NO: 70] refers to human peroxiredoxin 1, and 'PRDX2 Hs' [SEQ ID NO: 71] refers to human peroxiredoxin 2.

Please replace the paragraph on page 47 lines 15-16 with the following amended paragraph:

Figure 27 shows the BLASTP search result for the CG14440 gene product (Query) [SEQ ID NO: 72] with the best human homologous match (Sbjct) [SEQ ID NO: 73].

Please replace the paragraph on page 60 lines 30-32 and lines 1-2 on page 61 with the following amended paragraph

For the amplification of Sac domain-containing inositol phosphatase 2 (sac2) (SEQ ID N0:2): 5'- CCT GGA TCG CAC CAA CG -3'; mouse sac2 reverse primer (SEQ ID N0:3): 5'- TTA AGC TGC TGT TCC ATG ACC A-3'; Taqman probe (SEQ ID N0:4): (5/6-FAM) TCC AGG CTG CCA TAG CGC GC (5/6-TAMRA)

Please replace the paragraphs on page 61 lines 4-21 with the following amended paragraphs

For the amplification of mouse solute carrier family 25 (mitochondrial carrier, Aralar) member 12 (Slc25a12) (SEQ ID N0:5): 5'- CCT GCC AAC CCT GAT CAC A -3'; mouse Slc25a12 reverse primer (SEQ ID N0:6): 5' TTT CAA TGC CAG CGA AAG TG -3'; Taqman probe (SEQ ID N0:7): (5/6-FAM) CGG TGG CTA CAG ACT TGC CAC GG (5/6-TAMRA)

For the amplification of mouse solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 13 (Slc25a13) (SEQ ID NO: 8): 5'- AGC GGT GGT TCT ATG TCG ATT T -3'; mouse Slc25a13 reverse primer (SEQ ID NO: 9): 5'- CGG GAT TTA GGA ACC GGC T -3'; Taqman probe (SEQ ID N0:10): (5/6-FAM) AGG CGT GAA GCC CGT GGG ATC T (5/6-TAMRA)

For the amplification of mouse myelin gene expression factor 2 (mef2) (SEQ ID

NO:11): 5'- ACA AGG ATG GCA AGA GCA GAG -3'; mouse mef2 reverse primer

(SEQ ID NO: 12): 5'- ATG GAA ATT GCT TGG ACT GCT T -3'; Taqman probe

(SEQ ID NO:13): (5/6-FAM) CAT GGG CAC TGT CAC TTT TGA GCA GG

(5/6-TAMRA)